REMARKS/ARGUMENTS:

The above-identified patent application has been amended and Applicants respectfully request the Examiner to reconsider and again examine the claims.

Applicants submit herewith a copy of Figure 1 showing the correction of a typographical error in the word "SATELLITE." Approval of the proposed correction to Figure 1 is respectively requested. Presupposing approval of the correction, a corrected Figure 1 is enclosed herewith.

Claims 11 and 14 have been amended to correct inadvertent typographical errors.

Claims 1-11 have been rejected as being anticipated by "LNBP10 Series LNBP20" datasheet (hereinafter "the LNBP10 reference") in view of Vizer (U.S. Patent No. 5,893,023, hereinafter "Vizer"). Applicants respectfully traverse this rejection and submit that the LNBP10 reference, whether taken separately or in combination with Vizer, neither describes nor suggests the arrangement of claim 1 comprising a switch-mode power supply having a feedback port responsive to a reference voltage indicative of the selected DC voltage level, and an output port at which a regulated output voltage is provided, wherein the regulated output voltage is greater than the selected DC voltage level by a predetermined amount, and a linear amplifier having an input port coupled to the output port of the switch-mode power supply, a control port to which the reference voltage indicative of the selected DC voltage level is applied, and an output port at which an output voltage having the selected DC voltage level and being modulated by the analog AC tone signal is provided or the above arrangement further comprising the signal generator as set forth in claim 11. Nor do the cited references, whether taken alone or in combination, describe or suggest the method of claim 7 including selecting one of a plurality of DC voltage levels, providing a regulated output voltage with a switch-mode power supply and applying the regulated output voltage to a linear amplifier that provides an output voltage having the selected DC voltage level and being modulated by the analog AC tone signal.

With the claimed arrangement, the voltage dropped across the linear amplifier is minimized since the input voltage to the linear amplifier is maintained at a predetermined voltage greater than the amplifier's output voltage. The resulting lower power dissipation permits the LNB supply and control voltage regulator to be provided in the form of a monolithic integrated circuit having relatively small package dimensions, since heat sinking requirements are reduced. And, as described in Applicant's Summary section, on page 4 of the specification, "while for most applications, the use of a switch-mode power supply to provide the input voltage to a linear amplifier would be considered redundant, in the described satellite receiver application, this combination provides significant benefits. Specifically, the linear amplifier facilitates modulation by the analog AC tone signal and the switch-mode power supply provides a tracking input voltage to the linear amplifier in order to significantly reduce the power dissipation otherwise associated with the linear amplifier."

The Examiner relies on the LNBP10 reference as teaching the use of a linear amplifier in a LNB supply and control voltage regulator circuit and relies on Vizer as teaching the use of a switch mode power supply in a receiver and concludes that "[I]t would have been obvious to modify the LNBP10 circuit in view of Vizer's teachings to include a switch mode power supply in order to provide different operating voltages from a single DC voltage source, where the input of the switch mode power supply is connected to the single supply voltage source, and the control input of the switch mode power supply is coupled to VSEL, in order to regulate the output delivered to the linear amplifier means. The motivation would be to modify the LNBP10 circuit so it uses only one source with reduced power dissipation at the receiver, as taught by Vizer." (Office Action dated July 7, 2004, pages 3 and 4).

Applicants respectfully submit that there is no motivation in the prior art to combine the cited references as suggested by the Examiner in order to arrive at the claimed arrangement for several reasons. As described in Applicant's Background of the Invention section, the LNBP10 reference describes an LNB supply and control voltage regulator circuit comprising a linear amplifier to which power can be supplied from one of two voltage sources depending on the desired output voltage, in order to reduce the power dissipation in the linear amplifier. Thus, the

LNBP10 reference provides a solution for reducing power dissipation in the linear amplifier. As a result, one of ordinary skill in the art seeking to solve the problem solved by Applicants (namely, of reducing power dissipation in a linear amplifier that provides power and control signals to an LNB converter) and considering the LNBP10 teaching would not be motivated to look further for a power reduction solution. In fact, the LNBP10 reference teaches away from the combination of the references suggested by the Examiner in its teaching of using two, selectable input voltages as a way to reduce power dissipation in the linear amplifier. Thus, to modify the LNBP10 teaching in the manner suggested by the Examiner "so it uses only one source," would destroy the intended function of the reference; namely of providing two selectable input voltage sources as a mechanism for minimizing power dissipation in the linear amplifier.

Vizer does not provide the lacking motivation to combine the references in the suggested manner. Vizer teaches the use of a switch-mode power supply in a satellite receiver. The power supply is capable of providing different operating voltages in response to different duty cycles set by a microprocessor in order to permit the receiver to be connected to different antenna assemblies that require different operating voltages. (see Abstract) However, Vizer does not contemplate using a switch-mode power supply to provide a regulated input voltage to a linear amplifier, which linear amplifier provides an output voltage having the selected DC voltage level and being modulated by an analog AC tone signal, as claimed. Notably, Vizer does not seek to provide an output voltage comparable to the claimed output voltage having the selected DC voltage level and being modulated by the analog AC tone signal. Thus, one of ordinary skill in the art considering Vizer would not be motivated to use a linear amplifier at all, since to do so would be redundant for Vizer's purpose.

In view of the above, it is submitted that independent claims 1, 7, and 11 are patentable over the cited references. Claims 2-6 and 8-10 depend from, and thus include the limitations of independent claim 1 or claim 7. Accordingly, it is submitted that claims 2-6 and 8-10 are patentable as depending on an allowable base claim.

Dependent claims 12-14 have been rejected as being obvious over a combination of the LNBP10 reference and Vizer and further in view of Mammano et al. (U.S. Patent No. 5,411,562). Claims 12-14 depend from, and thus include the limitations of independent claim 11. In view of the above, it is submitted that claims 12-14 are patentable as depending on an allowable base claim.

As the claims and the entire case are believed to be in condition for allowance, an indication thereof is respectively requested.

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845.

Respectfully submitted,

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Attachments: One sheet of drawings (FIG. 1) with change marked in red and one sheet of corrected Fig. 1.

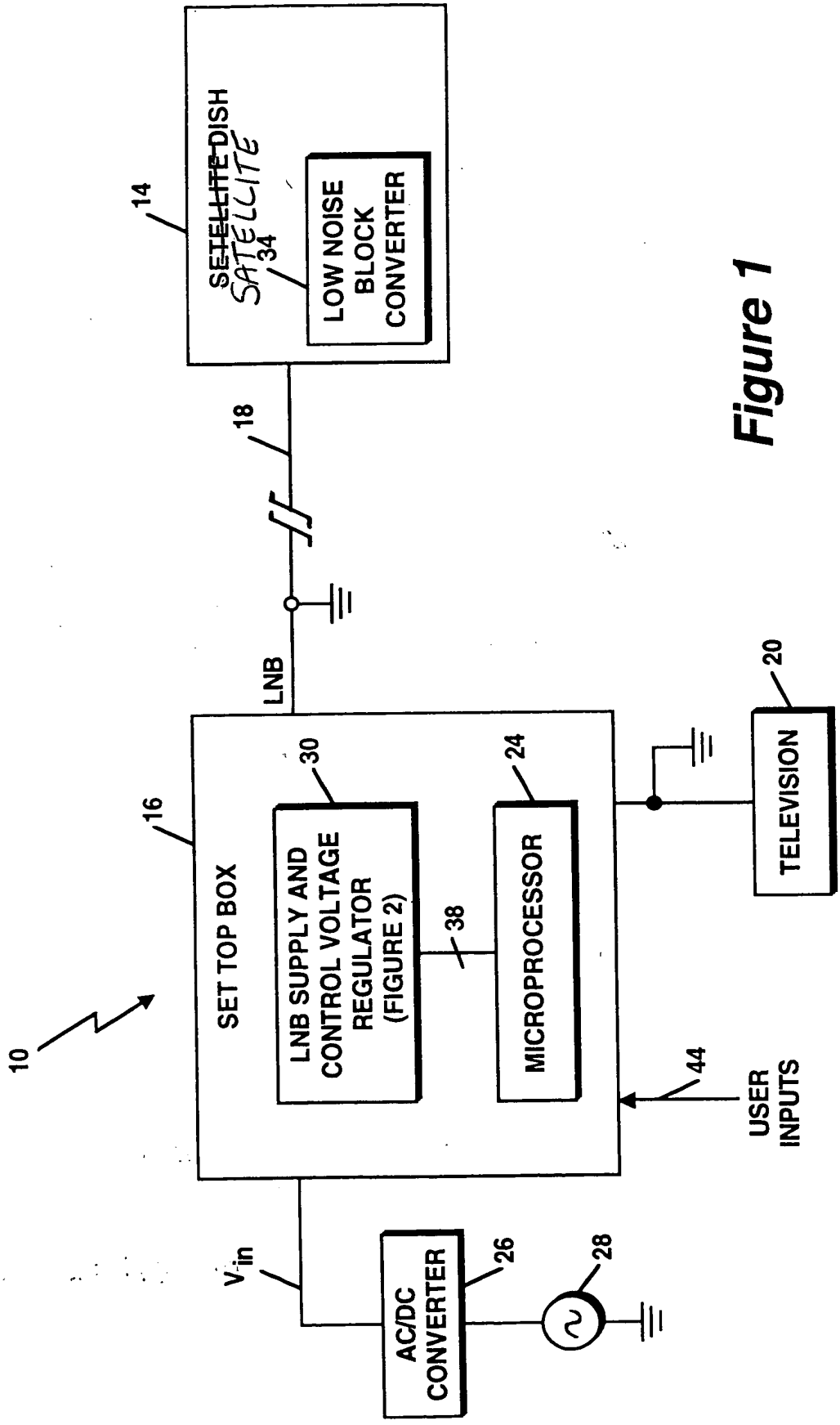

Figure 1